



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,483	12/28/2000	Chio Arjona Alejandro Rafael	MX/JFC- 0018	5891

7590

09/23/2002

Jonathan Grant Esq
2120 L St N W Suite 210
Washington, DC 20037

EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
----------	--------------

1711

6

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/750,483

Applicant(s)
Rafael et al.

Examiner
Rabon Sergeant

Art Unit
1711



The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 13, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-25 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:

- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

Art Unit: 1711

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Subject matter within originally filed claims 1-5 must be incorporated into the specification, if that subject matter is to appear in claims set forth for prosecution on the merits.
2. Claims 6-25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Adequate support has not been provided for the subject matter of claims 6-25. For example, support has not been provided for the methylhaloester reactant or the 16 hour reflux time. Applicants are required to show where support exists for the claim limitations presented within new claims 6-25.
3. Claims 6-25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There are numerous inconsistencies and errors within the specification that must be addressed. At page 3, applicants refer to the use of aromatic isocyanate; however, only the aliphatic diisocyanate, methyl diisocyanate, is exemplified. Further, applicants incorrectly refer to methyl diisocyanate as being an aromatic isocyanate. See claim 12. Therefore, it is

Art Unit: 1711

unclear with respect to the isocyanates that are encompassed by the specification. Within page 4, the disclosed formulas do not correspond to ethyl methyl diglycinate, methyl chloro propionate, methylene dianiline, and triethylamine. Furthermore, it noted that applicants apparently refer to polyglycolyl urea and polyglycolyl urea hydantoin resin interchangeably; however, the terms are not equivalent.

4. Claims 6-25 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of polyglycolyl urea hydantoin from the reaction of methyl methyl diglycinate with methylene diisocyanate, in the presence of cresylic acid and either triethylenediamine or 1,4-diazobicyclo (2,2,2) octane, wherein the methyl methyl diglycinate is derived from the reaction of methylene dianiline with methyl bromopropionate, in the presence of a C₁-C₄ aliphatic solvent and triethylamine, does not reasonably provide enablement for the production of polyglycolyl urea hydantoin from the reaction of diglycinate with aromatic isocyanate, in the presence of solvent and catalyst, wherein the diglycinate is derived from the reaction of diamine with methylhaloester, in the presence of a catalyst. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Except for the aforementioned compounds, applicants have failed to provide adequate guidance with respect to what other compounds can be used to produce the hydantoin resin of the invention. Applicants have provided no teachings that would allow one to substitute compounds

Art Unit: 1711

for those specifically disclosed and maintain a reasonable expectation of success. One of ordinary skill could not practice the invention as claimed without resorting to undue experimentation. Furthermore, with respect to claim 7, applicants specifically disclose at page 5 that chlorinated methyl propionate should not be used, because it yields worse results in the removal of residual by-products; it is noted that one of applicants' objectives is to decrease the production of by-products.

5. Claims 6-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, it is unclear if applicants are claiming a method for producing polyglycolyl urea or a method for producing polyglycolyl urea hydantoin resin. See line 1 of claim 1.

Secondly, formula I (claim 6) and formula II (claim 23) are incorrect.

Thirdly, within claim 12, methylene diisocyanate is not an aromatic isocyanate.

Fourthly, within claim 14, methylene diisocyanate lacks antecedent basis from claim 6.

Fifthly, within claims 15 and 16, it is unclear which catalyst and distillation step from claim 6 is being referred to.

Sixthly, within claim 18, applicants have failed to specify the necessary details governing the viscosity. The means of determination should be set forth.

Art Unit: 1711

Seventhly, within claim 20, no temperature condition has been set forth for the viscosity value.

Lastly, the subject matter of claim 24 lacks antecedent basis from claim 6.

6. The severity of the issues under 35 U.S.C. 112 is considered to preclude further search and consideration of the claims at this time.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent

September 21, 2002